PIEZOELECTRIC ELEMENT

ABSTRACT OF THE DISCLOSURE

A piezoelectric element includes a plurality of piezoelectric layers composed of a piezoelectric material containing Sr, Bi, Ti, and O, at least three vibration electrodes opposing each other, each disposed among the piezoelectric layers, and an energy-confining region formed in a region in which the vibration electrodes overlap, the energy-confining region being parallel to the planes of the vibration electrodes and exciting an n-th order longitudinal thickness vibration. The maximum length L of a secant between two intersections on the periphery of the energy-confining region and the distance t between the topmost vibration electrode and the bottommost vibration electrode satisfy the relationship nL/t of less than 10. The piezoelectric element is thermally stable and has a narrow allowable error.